

SUMMARY OF ANALYTICAL DATA REVIEW

Project Name: El Dorado Hills Naturally Occurring
Asbestos Multimedia Exposure Assessment

Location: El Dorado Hills,
California

Project TDD Number: 09-04-01-0011

PAN: 001275-0440.01TA

E & E Reviewer: Howard Edwards

Date: July 20, 2005

Laboratory(s): Asbestos TEM

Manager: Mark Bailey

Data Validation Reviewer: Trillium, Inc.

Reviewer: Denise A. Shepperd

Analytical Method(s): Asbestos by Polarized Light Microscopy

1. Data Validation Review

Trillium, Inc., reviewed all Asbestos by Polarized Light Microscopy data generated by Asbestos TEM Laboratories, Inc., for the El Dorado Hills Naturally Occurring Asbestos Multimedia Exposure Assessment in El Dorado Hills, California. The validation process included the following elements:

- Verification that all analytical documentation was provided,
- Review/evaluation of all analytical documentation based on appropriate guidance,
- Generation of a formal Data Validation Report, and
- Qualification and adjustment of data based on data validation.

The detailed data validation reports are attached.

2. Major Quality Findings of the Data Validation

Major quality findings regarding the soil analysis data generated by Asbestos TEM Laboratories, Inc., are that the laboratory appeared to have a high reporting bias as evidenced by their performance on the Performance Evaluation (PE) sample that was submitted prior to analyzing field samples for the project. All data were qualified as “J” due to this potential high bias.

3. Clarification and Corrections of Minor Findings

The validator noted that there were gaps in the chain-of-custody record submitted to her with the data package. As a corrective action, the Superfund Technical Assessment and Response Team (START) has ensured that the complete chain-of-custody records are included with the validated data package. A summary of the chain-of-custody is as follows:

SUMMARY OF ANALYTICAL DATA REVIEW

Project Name: El Dorado Hills Naturally Occurring
Asbestos Multimedia Exposure Assessment

Location: El Dorado Hills,
California

Project TDD Number: 09-04-01-0011

PAN: 001275-0440.01TA

E & E Reviewer: Howard Edwards

Date: July 20, 2005

- 10-08-04: Original samples were collected (oversight by Howard Edwards, START).
- 10-12-04: Original samples were hand-delivered by Howard Edwards to Asbestos TEM Laboratories, Inc. for preparation (received by Steven Schaffer).
- 11-19-04: Original samples and prepared sample splits were hand-delivered to Howard Edwards for archival (oversight by Steve Shaffer and Mark Bailey, Asbestos TEM Laboratories, Inc.).
- 11-19-04: Original samples and sample splits were archived by START at the U.S. EPA laboratory in Richmond California under lock and custody seal (Howard Edwards in coordination with Fred Cordini U.S. EPA).
- 12-07-04: One set of split samples was sent for analysis via Federal Express to EMSL Analytical, Inc. (by Howard Edwards).
- 12-08-04: Split samples were received by EMSL Analytical, Inc. (by Charles LaCerra).
- 03-11-05: Split samples were returned to START via Federal Express by EMSL Analytical, Inc. (by Charles LaCerra).
- 03-14-05: Split samples were received by START, then archived under lock and custody seal (by Amber Santilli [START], and Howard Edwards).
- 04-15-05: Split samples were hand-delivered by Howard Edwards to Asbestos TEM Laboratories, Inc. for analysis (received by Mark Bailey).

The validator noted that the analyst name and initials were unclear in the documentation. Analysts are as follows:

| Sample | Name | Initial |
|------------|---------------|---------|
| PE Samples | Diego Vasquez | DV |
| | Sandar Khin | SK |
| Samples | Steve Flexer | SF |
| | Mark Bailey | MB |

4. E & E Conclusions on Overall Data Usability

These data are considered usable for the following data use objectives for soil stated in the *Quality Assurance Project Plan (QAPP), El Dorado Hills Naturally Occurring Asbestos Multimedia Exposure Assessment*, dated September 2004.

- The soil sample data will be used to document whether and at what concentrations asbestos structures are present in soil at sampled locations.
- The soil sample data will used to assist with any soil mitigation decisions.

SUMMARY OF ANALYTICAL DATA REVIEW

**Project Name: El Dorado Hills Naturally Occurring
Asbestos Multimedia Exposure Assessment**

**Location: El Dorado Hills,
California**

Project TDD Number: 09-04-01-0011

PAN: 001275-0440.01TA

E & E Reviewer: Howard Edwards

Date: July 20, 2005

The data meet quality objectives stated in the QAPP for the following analytical sensitivity, precision, accuracy and completeness and sensitivity with the following notations:

- The analytical sensitivity specified for PLM was acceptable for all results. Additional TEM analysis was not performed. The sensitivity of PLM data may be insufficient for some data uses.
- The precision of laboratory replicates, laboratory duplicates and co-located samples met the quality objective goals.
- The accuracy for analysis of internal control samples was acceptable. In a separate report the U.S. EPA Quality Assurance Office will evaluate the accuracy for the blind and double-blind performance evaluation samples submitted to the laboratory.
- The completeness goal of 80 % for soil samples was achieved.

Attached are the Data Validation Reports with summary tables.